BBA

General Subjects

Vol. 1156, 1993

Cumulative Contents

Regular Papers

Isolation, partial amino acid sequence, and cellular distribution of heat-shock protein hsp98 from *Neurospora crassa*
A.O. Vassilev, N. Plesofsky-Vig and R. Brambl (USA) 1

Effects of 4-deoxy-L-*threo*-pentose, a novel carbohydrate, on neural cell proteoglycan synthesis and function
K.E. Dow, R.J. Riopelle, W.A. Szarek, M. Bols, E.R. Ison, J. Plenkiewicz, A. Lyon and R. Kisilevsky (Canada) 7

Alteration of cytochrome *P*-450 2C11-dependent testosterone metabolism in Gunn rat liver
C. Célier, S. Columelli and T. Cresteil (France) 15

Non-transferrin-bound iron species in the serum of hypotransferrinaemic mice
R.J. Simpson, C.E. Cooper, K.B. Raja, B. Halliwell, P.J. Evans, O.I. Aruoma, S. Singh and A.M. Konijn (UK, Israel) 19

Decay kinetics of $O_2^{\cdot-}$ studied by direct spectrophotometry. Interaction with catalytic and non-catalytic substances
B.J. Bolann, H. Henriksen and R.J. Ulvik (Norway) 27

Plasminogen binding by α_2-antiplasmin and histidine-rich glycoprotein does not inhibit plasminogen activation at the surface of fibrin
E. Angles-Cano, D. Rouy and H.R. Lijnen (France, Belgium) 34

Expression of a catalytically active human cytochrome *P*-4502E1 in *Escherichia coli*
D.K. Winters and A.I. Cederbaum (USA) 43

Renal excretion of pseudo-cross-linked human, porcine and bovine hemoglobins
B. Urbaitis, Y.S. Lu, C. Fronticelli and E. Bucci (USA) 50

Turnover rates of different collagen types measured by isotope ratio mass spectrometry
G.J. Rucklidge, G. Milne, B.A. McGaw, E. Milne and S.P. Robins (UK) 57

Trace levels of pyrroloquinoline quinone in human and rat samples detected by gas chromatography/mass spectrometry
T. Kumazawa, H. Seno, T. Urakami, T. Matsumoto and O. Suzuki (Japan) 62

Effect of thermodynamic water activity on amino-acid ester synthesis catalyzed by agarose-chymotrypsin in 3-pentanone
R.M. Blanco, J.L.L. Rakels, J.M. Guisán and P.J. Halling (UK, Spain) 67

Limited proteolysis of NADP-malate dehydrogenase from pea chloroplast by aminopeptidase K yields monomers. Evidence of proteolytic degradation of NADP-malate dehydrogenase during purification from pea
K. Kampfenkel (FRG) 71

Membrane-bound acetylcholinesterase: an early differentiation marker for skeletal myoblasts
H.F. Elson, M.K. Gentry and B.P. Doctor (USA) 78

Factors affecting the manganese and iron activation of the phospho*enol*pyruvate carboxykinase isozymes from rabbit
D.O. Lambeth, W.W. Muhonen, G.H. Jacoby and P.D. Ray (USA) 85

Structural requirements for duodenal permeability of heparin-diamine complexes
G. Zoppetti, I. Caramazza, Y. Murakami and T. Ohno (Italy, Japan) 92

Rapid Report

Renal and hepatic output of glutathione in plasma and whole blood
P.D. Dass, E.W. Bermes, Jr. and E.W. Holmes (USA) 99

Regular Papers

Immunological characterization of flavin-containing monooxygenases from the liver of rainbow trout (*Oncorhynchus mykiss*): sexual- and age-dependent differences and the effect of trimethylamine on enzyme regulation
D. Schlenk and D.R. Buhler (USA) 103

Halofuginone: An inhibitor of collagen type I synthesis
I. Granot, O. Halevy, S. Hurwitz and M. Pines (Israel) 107

Polyamine acetylation in rat liver following long-term ethanol ingestion
A. Perin and A. Sessa (Italy) 113

Phase partitioning detects differences between phospholipase-released forms of alkaline phosphatase – a GPI-linked protein
F.D. Raymond, D.W. Moss and D. Fisher (UK) 117

Pyrophosphate : fructose-6-phosphate 1-phosphotransferase and biosynthetic capacity during differentiation of hypocotyls of *Vigna* seedlings
H. Ashihara and F. Sato (Japan) 123

Salvage and interconversion of purines in developing *Artemia*
P. Rotllan, A. Liras and P. Llorente (Spain) 128

A top-down control analysis in isolated rat liver mitochondria: can the 3-hydroxy-3-methylglutaryl-CoA pathway be rate-controlling for ketogenesis?
P.A. Quant, D. Robin, P. Robin, J. Girard and M.D. Brand (France, UK) 135

Antioxidant protection against organic and inorganic oxygen radicals by normal human plasma: the important primary role for iron-binding and iron-oxidising proteins
J.M.C. Gutteridge and G.J. Quinlan (UK) 144

Recognition of anthracycline binding domains in bovine serum albumin and design of a free fatty acid sensor protein
E.J.F. Demant and M. Sehested (Denmark) 151

Identity of *D*-3-aminoisobutyrate-pyruvate aminotransferase with alanine-glyoxylate aminotransferase 2
Y. Kontani, M. Kaneko, M. Kikugawa, S. Fujimoto and N. Tamaki (Japan) 161

Thermostable β-glucosidase and β-xylosidase from *Thermotoga* sp. strain FjSS3-B.1
L.D. Ruttersmith and R.M. Daniel (New Zealand) 167

Anomalies in cell wall turnover associated with the growth temperature of *Bacillus subtilis*
T.-L. Wu, A.L. Koch and R.J. Doyle (USA) 173

Purification and characterization of two distinct lipases from *Candida cylindracea*
M.L. Rúa, T. Díaz-Mauriño, V.M. Fernández, C. Otero and A. Ballesteros (Spain) 181

Free radical and enzymatic mechanisms for the generation of protein bound reducing moieties
J.A. Simpson, S.P. Gieseg and R.T. Dean (Australia) 190

Tyrosine phosphorylation and intracellular alkalinization are early events in human neutrophils stimulated by tumor necrosis factor, granulocyte-macrophage colony-stimulating factor and granulocyte colony-stimulating factor
A. Yuo, S. Kitagawa, E. Azuma, Y. Natori, A. Togawa, M. Saito and F. Takaku (Japan) 197

Application of oligo$(dT)_{30}$-latex for rapid purification of poly$(A)^+$ mRNA and for hybrid subtraction with the in situ reverse transcribed cDNA
K. Kuribayashi-Ohta, S. Tamatsukuri, M. Hikata, C. Miyamoto and Y. Furuichi (Japan) 204

Purification and characterization of the ganglioside-binding fragment of *Clostridium botulinum* type E neurotoxin
Y. Kamata, Y. Kimura, T. Hiroi, G. Sakaguchi and S. Kozaki (Japan) 213

The α- and β-subunits of the jacalins are cleavage products from a 17-kDa precursor
L.D. Ngoc, M. Brillard and J. Hoebeke (France, Viet Nam) 219

Adaptive changes of intestinal cellular retinol-binding protein, type II following jejunum-bypass operation in the rat
S. Takase, T. Goda and H. Shinohara (Japan) 223

Rapid Reports

Neonatal rat liver contains low concentrations of Cu-Zn superoxide dismutase protein and mRNA
F.L. Yang, E.A. David and R.A. DiSilvestro (USA) 232

Antioxidant role of dehydroascorbic acid reductase in insects
C.B. Summers and G.W. Felton (USA) 235

Regular Papers

Dietary vitamin E reverses the effects of ultraviolet light irradiation on rat skin glycosaminoglycans
M.O. Longas, D.K. Bhuyan, K.C. Bhuyan, C.M. Gutsch and K.O. Breitweiser (USA) 239

The acute phase reactant serum amyloid A (SAA3) is a novel substrate for degradation by the metalloproteinases collagenase and stromelysin
T.I. Mitchell, J.J. Jeffrey, R.D. Palmiter and C.E. Brinckerhoff (USA) 245

Isolation and characterization of a sialic acid-specific binding lectin from the hemolymph of Asian horseshoe crab, *Tachypleus tridentatus*
I. Tsuboi, M. Matsukawa, N. Sato and S. Kimura (Japan) 255

Role of the trehalose carrier in dehydration resistance of *Saccharomyces cerevisiae*
E.C.A. Eleutherio, P.S. De Araujo and A.D. Panek (Brazil) 263

Irreversible inactivation of 3-hydroxy-3-methylglutaryl-CoA reductase by H_2O_2
R.V. Omkumar and T. Ramasarma (India) 267

Does lung NAD(P)H : quinone reductase (DT-diaphorase) play an antioxidant enzyme role in protection from hyperoxia?
P.L. Whitney and L. Frank (USA) 275

Clearance of circulating γ-glutamyltransferase by the hepatic galactose receptor. Variability in clearance rate due to carbohydrate heterogeneity of the enzyme
N.-E. Huseby, B. Mortensen and B. Smedsrød (Norway) 283

The glycosides of hydroxylysine are final products of collagen degradation in humans
L. Moro, K. Noris-Suarez, M. Michalsky, M. Romanello and B. De Bernard (Italy) 288

Persistent decrease in spermidine/spermine N^1-acetyltransferase activity in 'post-regeneration' rat liver
M.E. Ferioli (Italy) 291

Interaction between neutrophil-derived elastase and reactive oxygen species in cartilage degradation
H. Iwamura, A.R. Moore and D.A. Willoughby (UK) 295

Effects of seven months' exposure to a static 0.2 T magnetic field on growth and glycolytic activity of human gingival fibroblasts
H. Yamaguchi, K. Hosokawa, A. Soda, H. Miyamoto and Y. Kinouchi (Japan) 302

In vitro and ex vivo xanthine oxidoreductase activity in rat and guinea-pig hearts using hypoxanthine or xanthine as substrate
M. Janssen, M. Tavenier, J.F. Koster and J.W. De Jong (Netherlands) 307

α-1,4-Glucan lyase, a new class of starch/glycogen degrading enzyme. I. Efficient purification and characterization from red seaweeds
S. Yu, L. Kenne and M. Pedersén (Sweden) 313

Characterization and biological activity of 8-substituted analogues of 2′,5′-oligoadenylates
K. Nagai, K. Kanbara, H. Nakashima, N. Yamamoto, P.F. Torrence, R.J. Suhadolnik and H. Takaku (Japan, USA) 321

The interaction of sodium nitroprusside with peripheral white blood cells in vitro: a rationale for cyanide release in vivo
J.M. Campbell, F. McCrae, J. Reglinski, R. Wilson, W.E. Smith and R.D. Sturrock (UK) 327

Calculating three-dimensional molecular structure of paliurine B from atom-atom distance and restrained energy minimization
C. Yu, Y.-Y. Tseng and S.-S. Lee (Taiwan) 334

Cumulative Contents, Vol. 1156 343

Author Index 346